AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1.-21. (canceled)

22. (Previously Presented) High-temperature sensor comprising a metallic protective tube and a measuring resistance arranged in a ceramic casing together with strain-relieved measuring resistance connection wires, the ceramic casing being surrounded by a ceramic powder and connected to an electric connecting cable, wherein the strain-relieved measuring resistance connection wires and internal conductors connect the measuring resistance to the electric cable, said measuring resistance encapsulated in the ceramic casing and said internal conductors are arranged in said metallic protective tube, said protective metallic tube has a tapered tip in the vicinity of said measuring resistance and said ceramic powder densely fills the protective tube and comprises admixtures of oxygen-providing oxide compounds and the sensor comprises at least one auxiliary component arranged proximate connection of the connecting cable to the protective tube, the at least one auxiliary component having a higher coefficient of thermal expansion than the protective tube.

23. (Previously Presented) High-temperature sensor according to claim 22, wherein said ceramic powder comprises aluminum oxide and/or magnesium oxide and an oxygen-providing metallic or inorganic non-metallic redox agent.

24. (Previously Presented) High-temperature sensor according to claim 22 or 23, wherein said auxiliary component is an intermediate jacket consisting of aluminum.

25. (Previously Presented) High-temperature sensor according to claim 22 or 23, wherein the internal conductors are provided with ceramic insulation and the ceramic casing is sufficiently long that it extends beyond a joint of the measuring resistance connection wires to the internal conductors and a space between the measuring resistance with the measuring resistance connection wires and the ceramic casing is filled with a high-temperature-resistant cement.

26. (Previously Presented) High-temperature sensor according to claim 22 or 23, further comprising a jacketed cable having internal conductors and wherein the ceramic casing is sufficiently long that it extends beyond a joint of the measuring resistance connection wires to the internal conductors of the jacketed cable and a space between the measuring resistance with the measuring resistance connection wires is filled with a high-temperature-resistant cement.

27. (Previously Presented) High-temperature sensor according to claim 22 or 23, wherein the measuring resistance comprises a platinum thin film measuring resistance.

28. (Previously Presented) High-temperature sensor according to claim 22 or 23, further comprising a coupling for coupling the sensor to a site at which the high temperature

sensor is to be utilized and a minerally insulated jacketed cable is welded on the protective tube, a joint formed by the weld being situated outside a part of the sensor which is directly behind the coupling.

29. (Previously Presented) High-temperature sensor according to claim 28, wherein the coupling comprises a collar welded on the protective tube.

30. (Previously Presented) High-temperature sensor according to claim 26, wherein the ceramic housing extends to or slightly into the jacket of the jacketed cable and the high-temperature-resistant cement fills the ceramic casing

31. (Previously Presented) High-temperature sensor according to claim 30, further comprising a high-temperature-resistant injection molded plastic fitting within which the internal conductors of the jacketed cable are connected to the connecting cable.

32. (Previously Presented) High-temperature sensor according to claim 30, further comprising a high-temperature-resistant injection molded plastic fitting within which the internal conductors of the protective tube are connected to the connecting cable.

33. (Previously Presented) High-temperature sensor according to claim 22 or 23, further comprising a material having a substantially higher coefficient of thermal expansion than the coefficient of thermal expansion of the metal of the protective tube and having surfaces at least portions of which are highly oxidized, the material being arranged in

middle and/or upper portions of the protective tube for helping to keep the protective tube relatively filled as the tube undergoes thermal expansion substantially greater than that of the ceramic powder and for releasing oxygen into the protective tube

34. (Currently Amended) High-temperature sensor according to claim ~~34~~ 33, wherein the material comprises granular metal or granular inorganic non-metal.

35. (Currently Amended) High-temperature sensor according to claim 22 or 23, wherein the internal conductors comprise conducting sheets within ceramic tubes, the internal conductors are joined to the measuring resistance, and the measuring resistance, including the joint thereof with the internal conductors, are received within the ceramic casing, the ceramic casing being filled with a high-temperature-resistant cement, and the high-temperature sensor further comprises at least one metallic ring having a high thermal coefficient of expansion, the protective tube having a wider end and the at least one metallic ring being inserted in an annular space between the protective tube and a said ceramic tube with a ~~significant~~ clearance.

36. (Previously Presented) High-temperature sensor according to claim 22, wherein the protective tube has been formed by deep drawing and includes a sealing collar formed thereon.

37. (Previously Presented) High-temperature services according to claim 22, wherein the protective tube has been formed by machining and drilling.